

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 7-8, 10-12 and 14 are rejected under 35 U.S.C. 102(a) as being anticipated by Shih (US 7,796,122).

As to **claim 7**, Shih discloses a display apparatus, comprising:

a substrate comprising a metal layer (Fig. 1(7)),

a display device (Fig. 1(3)) disposed on the substrate, the display device including a display portion and a driving portion (Fig. 1(6)), and a sensor portion (Fig. 1(4)) for detecting a coordinate using electromagnetic induction;

wherein the sensor portion is arranged on an opposite side of the substrate from where the display device is disposed (see Fig. 1, sensor layer 4 is on opposite side of the substrate 3), and

wherein the metal layer of the substrate has an electromagnetic wave transmissive structure (Col. 3 line 3- Col. 4 line 17).

As to **claim 8**, Shih discloses a display apparatus according to Claim 7, wherein the metal layer is a metal sheet provided with plurality of through-holes (Fig. 3(52) inductions cell with holes).

As to **claim 10**, Shih discloses a display apparatus according to Claim 7, wherein the metal layer is a metal sheet provided with an unevenness (Fig. 6(53) provide with unevenness).

As to **claim 11**, Shih discloses an input apparatus, comprising:  
a substrate comprising a metal layer (Fig. 1(7)),  
display device (Fig. 1(3)) disposed on the substrate, the display device including a display portion and a driving portion (Fig. 1(6)),

a pen which designates a position on a display surface of the display portion (see Fig. 7) and generates an electromagnetic wave locally at the designated position, and a sensor portion for detecting a coordinate using electromagnetic induction (Col. 6 lines 3-62);

wherein the sensor portion is arranged on an opposite side of the substrate from where the display device is disposed (see Fig. 1, sensor layer 4 is on opposite side of the substrate 3), and

wherein the metal layer of the substrate has an electromagnetic wave transmissive structure (Col. 3 line 3- Col. 4 line 17).

As to **claim 12**, Shih discloses an input apparatus according to Claim 11, wherein the metal layer is a metal sheet provided with a plurality of through-holes (Fig. 3(52) inductions cell with holes).

As to **claim 14**, Shih discloses an input apparatus according to Claim 11, wherein the metal layer is a metal sheet provided with an unevenness (Fig. 6(53) provide with unevenness).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shih (US 7,796,122) in view of Christensen (US 6,229,259).

As to claims 9 and 13, Shih discloses an input apparatus according to claims 1 and 11 respectively.

However, Shih disclosure does not teach the metal layer is a sheet comprising metal fiber.

Christensen discloses a display device wherein teaches woven of metal fiber (See Abstract).

It would have been obvious to one ordinary skill in the art at the time of invention was made to used of metal fiber as in Christensen into the display apparatus of Shih because it retains operational performance with mechanical flexing, which is an improvement over metal mesh.

***Response to Arguments***

5. Applicant's arguments with respect to claims 7-14 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUK CHOW whose telephone number is (571)270-1544. The examiner can normally be reached on 8-6 M-TH E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quan-Zhen Wang can be reached on (571) 272-3114. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. C./  
Examiner, Art Unit 2629

/Quan-Zhen Wang/  
Supervisory Patent Examiner, Art Unit 2629